



***Progress Report  
Babati District R4D Platform  
Inaugural Workshop, April 10-11, 2014***

**Per Hillbur**



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The Africa Research In Sustainable Intensification for the Next Generation (Africa RISING) program comprises three research-for-development projects supported by the United States Agency for International Development as part of the U.S. government's Feed the Future initiative.

Through action research and development partnerships, Africa RISING will create opportunities for smallholder farm households to move out of hunger and poverty through sustainably intensified farming systems that improve food, nutrition, and income security, particularly for women and children, and conserve or enhance the natural resource base.

The three regional projects are led by the International Institute of Tropical Agriculture (in West Africa and East and Southern Africa) and the International Livestock Research Institute (in the Ethiopian Highlands). The International Food Policy Research Institute leads the program's monitoring, evaluation and impact assessment. <http://africa-rising.net/>



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## The Babati District R4D Platform

### Background

The research program Africa RISING is established to create opportunities for smallholder farm households to move out of hunger and poverty through sustainably intensified farming systems that improve food, nutrition, and income security, particularly for women and children, and conserve or enhance the natural resource base (Africa RISING Program Framework, p. 2). Africa RISING is organized as a network of partners, who carry out the jointly planned project activities. Thus, coordination of partners and activities in the project sites is an essential part of the program.

The focus for Africa RISING must be on efficient ways to reach impact, *i.e.* better livelihoods and health for rural people, strengthened market integration and sustainable use of natural resources. This will include a focus on appropriate technological innovations (new crop and livestock varieties, crop arrangements, fertility management, pest management, etc) as well as institutional innovations, involving rural credits, tenure system, market conditions and socio-cultural organization.

In terms of research paradigms, a greater awareness amongst research and development professionals of the importance of the contexts that are required for successful innovation at the household level is likely to lead to higher adoption rates and more widespread development outcomes. Successful implementation of these approaches can be facilitated by a stronger focus on input supply systems, export markets and multi-stakeholder partnerships (Africa RISING Program Framework, p. 4). This report is a first step in our ambition to provide long-term positive impact by systematic interventions through a demand-driven approach, in this case represented by the outcomes of the inaugural workshop of the Babati District Research-for-Development (R4D) Platform, held in April, 2014. As the platform itself could be seen as a local institution following an open-ended process, this document should be read as part of the documentation of this process, and not necessarily as an updated report on Africa RISING's ongoing research activities in Babati District. The report also serves as a background and a starting point for the newly appointed Platform management committee.

### An R4D platform in Babati

One of the main challenges to agricultural development in Africa is to recognize heterogeneity, both in terms of socio-cultural variation and dynamics - which is apparent even at the local level in many countries and societies – and bio-physical diversity, providing drastically different growing conditions even at farm level. Babati District is unique in its agro-ecological and socio-cultural diversity, represented by the six Africa RISING project villages - Long, Sabilo, Seloto, Matufa, Hallu and Shaurimoyo.

The research-for-development (R4D) platform is an initiative to address these challenges of diversity and heterogeneity, while at the same time focus on smallholders' demands and the program's opportunity to have positive impact. The ultimate goal is to stimulate learning and innovation to improve livelihoods in terms of productivity, income generation and nutrition in Babati District. The platform also serves as a vehicle for prioritizing and scaling of sustainable intensification through integrated farm practices.

The tools and methodologies employed in this report can all be seen as part of an area-based approach to sustainable intensification, guided by principles of nearness – *i.e.* how different objects and processes interact spatially, in a landscape – compared to a more traditional scientific (discipline-oriented) approach guided by principles of similarity. This emphasis of spatial interactions, as *e.g.* in an agricultural landscape, is called the arena perspective (Hillbur 1998). The value added here by the arena perspective is that it makes visible the reality of farmers and other local actors, and thus includes local knowledge systems in strategies and decision-making about interventions.

A powerful technique in applying an area-based approach is the establishment of R4D platforms. These platforms may well operate at different levels, and hypothetically virtual platforms are possible for certain kinds of interaction. In this report, however, an R4D platform has a distinct geographical focus, in order to address a wide range of stakeholders operating in the same district. The principle of nearness is important to keep together the trans-disciplinary, multi-sector focus.

## Research-for-Development (R4D) Platforms

### Rationale

Since system interventions require the engagement of various research and development partners, operating in the context of specific components within these systems, proper means for meaningful and effective interactions are needed to prioritize, guide, and evaluate the various research and development processes within Africa RISING. In line with the logic of the CGIAR Research Program on the Humid Tropics, R4D platforms will be constituted within specific development domains. (Africa RISING Program Framework, p.8)

As shown above, the rationale for employing R4D platforms is to link a range of organizational actors in R4D platforms that can promote the simultaneous technological, social and institutional change needed for sustainable intensification. This may include a range of activities, but from a research point of view, the R4D platform responds to the establishment of three different communicative strategies: network building, social learning and conflict management (Leeuwis and Aarts 2011:31). Each of these are important to stress, but the role of ‘social learning’ - rather than dissemination – should be emphasized, as well as ‘conflict management’, which is needed anywhere where common resources, different perspectives and policy come together.

There are some recent research results and experiences from the use of multi-stakeholder platforms in relation to agricultural innovation. Adekunle et al (2010) provide a detailed framework for setting up so-called innovation platforms, and they distinguish between a strategic and an operational level (innovation clusters), where the latter would roughly correspond to the district level. In contrast, R4D platforms have a different focus as they emphasize better understanding of social dynamics and the institutional environment, and can put the adoption of particular technologies into a wider context. R4D platforms differ from innovation platforms as they may take a wider perspective through collaborative learning and research on farming systems rather than a focus on a particular commodity and its value chain.

The formation of effective R4D platforms involves a number of challenges:

- A clear methodology to include actors outside the research – extension – farmer sphere; especially private sector from the value chain, and policy makers. Validation of stakeholders in relation to contribution and benefits is however an important step before a formal establishment of the platform.

- Methodology for making actors and critical resources visible. This is particularly crucial for making the most of contributions from local knowledge. All stakeholders are there because they make valuable contributions!
- Experience and readiness to facilitate negotiations and conflict resolution. An R4D platform for sustainable intensification will address issues where current norms, rules and policies need to be questioned. Leadership from actors with diverging interests is a key to success.
- Consistent methodology for creating an inclusive environment, allowing new ideas to be tested and grow. This includes collaboration in trying and evaluating different technologies, potential for scaling, the role of experimentation, failures, etc.
- Identification of training and capacity building needs of actors throughout the process
- Monitoring and evaluation of progress of the platform
- Establishment of links to national and regional policy through participation of relevant stakeholders at strategic levels

## Potential outputs and benefits from the R4D platform

The primary beneficiaries are the small-scale farmers and other stakeholders in rural areas who, through the platform, will have better access to information, technologies, expertise, credits, markets, etc., supporting agricultural intensification for improved and sustainable livelihoods. Depending on the methodology used for involving farmers and other stakeholders in research, they will increase their understanding of the dynamics of these networks and the conditions/requirements of their success. For the researchers, the platform is an important source of feedback on - and further development of - on-going research activities.

An important aim of the platform is that research outputs as well as outcomes of platform discussions/negotiations will inform decision makers, public and private players in agricultural development and educators about how the R4D platform can work to promote technological, social and institutional change, in order to put sustainable intensification to scale.

## The multi-stakeholder approach

There is a range of reasons why an R4D platform is applying a multi-stakeholder approach, related to the basic functions of research for development: First of all, research institutions need a demand-driven approach as a complement to more traditional “science-driven” approaches. The platform may help in making research more relevant, as well as raising opportunities to adapt and disseminate research results. Previous research has shown that we must go beyond the “research – extension – farmer continuum” to be successful in this, as the facilitation of adoption of innovations also depend on market linkages and an enabling policy environment. The second dimension of research for development is the targeting and effectiveness of development interventions. While research is normally a relatively small-scale activity (in terms of beneficiaries), development initiatives supporting good governance and market access must play the role of promotion of new ideas to a wider audience. This calls for a wide range of stakeholders like NGOs, financial institutions, market agents and policy makers in addition to solid representation of farmers, extension agents and research institutions.

**Table 1. Stakeholders and their potential contributions to an R4D platform in the agricultural sector (structure based on Tenywa et al 2011)**

Category of stakeholders	Potential contribution
1. Farmers (men, women and youth)	<ul style="list-style-type: none"> <li>- identify and map challenges</li> <li>- make local knowledge visible</li> <li>- test, develop and evaluate candidate interventions</li> <li>- communicate results</li> </ul>
2. Input suppliers <ul style="list-style-type: none"> <li>- stockists (seeds, fertilizers, pesticides, herbicides, veterinary drugs)</li> <li>- manufacturers and dealers (farm implements)</li> <li>- crop/livestock boards</li> <li>- cooperative societies</li> <li>- other agri-business enterprises</li> </ul>	<ul style="list-style-type: none"> <li>- timely delivery of quality and affordable inputs/information</li> <li>- commercialize the supply of inputs/tools that support agricultural risk management</li> <li>- package hardware and software (e.g. after-sale service)</li> <li>- knowledge sharing and promotion of appropriate inputs</li> </ul>
3. Output handling and market support agents <ul style="list-style-type: none"> <li>- crop and livestock traders</li> <li>- agro-processors</li> <li>- transporters</li> <li>- other agri-business players</li> </ul>	<ul style="list-style-type: none"> <li>- provide strategic market/system linkages to support producers</li> <li>- guarantee systems/contract farming systems</li> <li>- develop strategies that improve quality and shelf-life of agricultural products</li> <li>- knowledge sharing and flexibility in scaling</li> </ul>
4. Financial institutions (especially those providing savings, credit and insurance services)	<ul style="list-style-type: none"> <li>- develop financial products/services that support interventions</li> </ul>
5. Extension agents (from local and national governments, NGOs and other farmers' support organizations)	<ul style="list-style-type: none"> <li>- knowledge sharing on identification, development and implementation of projects</li> <li>- support communication and promotion of end products</li> </ul>
6. Agricultural research institutions	<ul style="list-style-type: none"> <li>- critical situation analysis</li> <li>- leadership in designing interventions</li> <li>- conduct new research where necessary</li> <li>- communication of results</li> </ul>
7. Policy makers	<ul style="list-style-type: none"> <li>- mobilize the farmers</li> <li>- support formulation of appropriate policies</li> </ul>



## **Preparing for the Babati R4D platform**

### **Identifying potential stakeholders**

The initiative to establish an R4D Platform in Babati District came from Africa RISING. The research program has operated in the area for two years and has realized that issues need to be tackled at a broader scale. As a starting point, a preliminary list of stakeholders in sustainable intensification for Babati was prepared by the Africa RISING consultant (Hillbur 2013a, 2013b) with some help and feedback by key informants from local research and extension staff. Stakeholders seen as relevant to sustainable intensification at the district level were categorized according to their main occupation, or potential contribution. This first step is to get an orientation about how to continue the setting up of the platform. Are these stakeholders relevant to a focus on sustainable intensification? Which stakeholders are not included? What contributions can they make? Who are the beneficiaries? How do we form a platform to get a high level of creativity? How do we secure impact? Another starting point is to define focus for the platform, in this case “sustainable intensification of farming in Babati District”, and a validation of partners in relation to their contributions and benefits from different interventions.

As a preparation for the platform, all stakeholder groups were contacted well in advance and invited to discussions with the facilitators on each part’s potential benefits and contributions to a platform. The first discussions took place in October 2013 during an Africa RISING research team meeting in Babati, attended by national and international researchers, government extension staff and farmers from all of the project villages. The preparations of the stakeholders were followed up by the facilitators through visits, interviews and discussions with potential stakeholders from December 2013 to February 2014. The ambition of this approach was to find out whether there was any interest at all in such a platform, and if so, to inform and discuss the aim of the platform with all stakeholders before the first stakeholder meeting. In this way, we wanted to give all stakeholders (organizations and individuals) an opportunity to be well prepared for the workshop. Formal invitations to all stakeholders and their organization were sent well in advance (minimum six weeks) before the workshop.

### **Inaugural workshop - Results**

#### **Response to the call by stakeholders**

Very fortunately, the response to the invitations was overwhelming. Almost all stakeholder organizations and individuals contacted responded positively to the call, and thus the set format for the inauguration workshop to include about 60 participants was fulfilled. Expenses for travel and, if needed, accommodation for stakeholders outside Babati was covered by Africa RISING for this inaugural meeting.

In addition, the organizing committee got a number of inquiries from other individuals and institutions to participate, of which some will be included in the next phase. All identified stakeholder organizations signed up for the workshop, while a couple of participants cancelled their final participation on the last day. Towards the end of the workshop, the stakeholder groups were asked to identify potential future participants/members of the platform, and this list is now taken into consideration for the next upcoming activities. The full program of the inaugural workshop can be found in Annex 1, which also included detailed presentations of ongoing Africa RISING research activities. These activities are reported elsewhere, and the research presentations can be found at <http://africa-rising.wikispaces.com> . We will now turn to present the major outputs of the workshop itself.

## Trends and challenges related to sustainable intensification

During the first day of the workshop, the participants carried out a first group task (in mixed spontaneously formed groups) about identifying the current trends in Babati District and the kind of challenges that need to be faced in the near future. The results from each of the six groups (6-8 members/group) were documented and orally presented in a plenary session. The complete presentations are available in Annex 2.

### Scoping

The announced topic of the workshop was sustainable intensification, which was further stressed by the invitation of existing Africa RISING partners and stakeholders. After a first round of identifying trends and challenges, an opportunity was given to further narrow down (or opening up) the main topic in order to reach a better understanding of what is meant by sustainable intensification. This is called “scoping” and is a process that appears at different stages of platform initiation and management. It helps in identifying the key issues around which the platform will be organized and the potential responsibilities of the platform before it gets operational. After the presentations from the groups on trends and challenges, the facilitators made a summary of recurring themes in the presentations, and opened the floor for discussion of the themes as well as opportunities to add, rephrase or remove items from the list of key issues. The following broad themes were singled out as essential aspects of sustainable intensification in Babati District:

**Markets:** improved and continuous access to farm inputs; access to cereal markets other than maize; marketing of livestock and its products

**Capacity building:** identification and measures to mitigate crop pests; prevention, early identification and treatment of livestock diseases; training in farming as a business, including value addition of farm produce, diversification of crops/economy; pasture management; proper training in research program activities to reach sustainability and wide adoption of technologies and practices

**Land use:** resolving conflicts between farming and livestock keeping; introduction of proper land use practices; improved pasture management

**Infrastructure:** improved infrastructure for better market access; irrigation technology to reduce dependency of rainfall/rainfed crops

**Youth:** training and incentives for youth to become farmers

Apart from these themes, broader issues like climate change and population increase/family planning were mentioned. For the complete discussion, please see Annex 2. An essential outcome of the scoping was that there was a unanimously expressed need for a forum, where these challenges can be discussed in the future. From this point onwards, the Babati District R4D platform is to be seen as that forum.

## Suggested future activities

As the main challenges were identified, the turn had come to discuss what role an R4D platform can have in meeting some of these challenges, and to what extent a platform can help improving conditions on the ground. A second group activity focused on suggested future activities and responsibilities for the platform. These discussions were held in groups representing the different stakeholder categories. Due to time constraints on the second day, no presentations were made in plenary, but all individuals handed in a list of priority activities for the future platform, which as part of this report is handed over to the newly formed platform management committee (Annex 3). A quantitative analysis of the written documentation – in terms of how often different terms/concepts occur – the platform should involve in at least three major activities/areas: livestock, land use and capacity building. The word “farmers/*wakulima*” is the most common, followed by “livestock/*mifugo*”, further stressing the importance of involving the farmers in platform activities. This is a very simplified picture of the discussions, and it may also reflect the broad participation of farmers and livestock-oriented stakeholders in the workshop. It is however advisable to go through the documentation carefully to see in what context these aspects are mentioned. Nevertheless, it is an outcome of the discussions during the workshop, and it is from here new activities can be planned.

## The way forward

### The new platform management committee

Towards the end of the workshop, more focus was put on the future organization of the platform, and the participants resumed in groups representing their stakeholder category, *i.e.* farmers were in one group, NGOs in another, private sector in yet another, etc. While discussing future priorities and activities of the platform, the groups were also asked to nominate a candidate from each group to represent in a platform management committee. The workshop meeting had by then agreed that a committee should be made responsible for planning for future activities, and that all stakeholder groups should be represented. After nomination from the groups and a following plenary discussion about criteria such as gender balance and representatives from livestock and crops-oriented activities, the new management committee should have the following composition (10 representatives):

Farmers: 2 representatives

Extension agents: 2 representatives

Private sector: 1 representative

NGOs: 1 representative

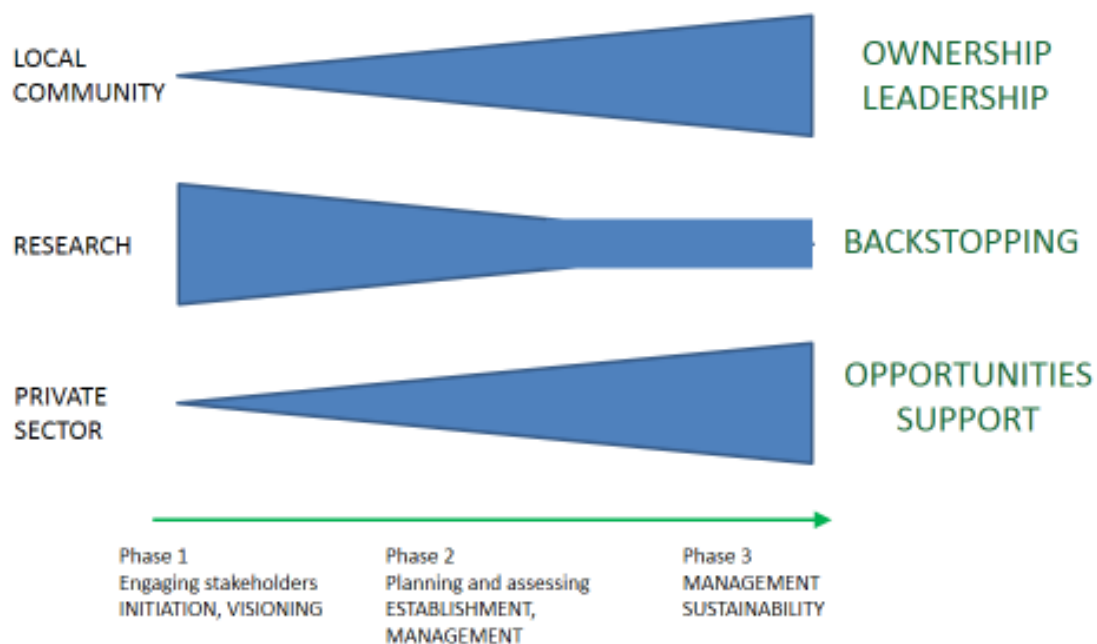
Research: 2 representatives

Policy-makers: 1 representative

Babati District Council management: 1 representative

After the inaugural workshop was closed, the newly formed platform management committee was summoned for its first meeting. The facilitators of the inaugural workshop and an Africa RISING representative opened the meeting with a short presentation of the road ahead for the coming six months, including the continued involvement and support from Africa RISING. The management committee selected a chairperson, and from this point the management committee has taken responsibility for future functioning of the platform. It was decided that the next committee meeting will be held in Babati on June 17, 2014. Among the discussion points for that meeting is preparations

for the Annual Planning Meeting for Africa RISING, East and Southern Africa, to be held in Arusha in September 2014. The Babati R4D Platform is invited to this meeting as a stakeholder. The platform is also expected to have a stakeholder meeting every six months, the next meeting suggested to be held in October, 2014. Africa RISING will be supporting the platform with management advice, research, monitoring and evaluation throughout the life-span of the program (end of 2016).



**Figure 2. The changing roles of different stakeholders through different stages/phases of a platform process (revised and adapted from Devaux et al 2005 in Makini et al 2013)**

## Summary and Conclusions

Based on an initiative from Africa RISING, and within a planning period of about six months, Babati District has managed to establish a Research-for-Development (R4D) Platform with a main focus on “sustainable intensification”. The inaugural workshop for the Babati District R4D Platform was held April 10-11, 2014, and this report is a summary of the conceptualization of R4D platforms, the preparations and the results of the workshop itself.

Due to careful preparations and great commitment of the stakeholder organizations, the workshop succeeded in completing its first phase, initiation and establishment of the platform. The future scope of the platform was widely discussed, and some major themes emerged out of these discussions. It seems there is some consensus among stakeholders that linkages between farmers and other market agents must be strengthened, and this refers to markets for inputs as well as for selling crop and livestock products. A major concern for the platform will also be capacity building

activities for different stakeholders, particularly within crop pests/animal diseases, pasture management and to train farmers in farming-as-a-business and further stimulate the long-term adoption of technologies and practices introduced by research institutions. Another suitable task for the Babati District R4D Platform will be to involve in land use policy, as there are many challenges to sustainable intensification in the district related to improper land use practices, which induce land conflicts and unsustainable land management.

As the establishment of an R4D platform is an open-ended process, there are still measures to be taken to make sure that the initial investments and the established networking between stakeholders will be sustained. The initial phases of an R4D platform is laid out in Figure 2, and this figure was discussed during the workshop and may serve as an inspiration for the future planning of platform activities.

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<http://africa-rising.wikispaces.com> : This is the official website for downloading documents from Africa RISING program activities. All documentation from the Babati District R4D platform, including this report, will be available here.

## Annex 1: Program for the workshop

### PROGRAM

#### Thursday, April 10

Venue: Main Hall, White Rose Hotel

10.00 – 10.30	Welcoming Address
10.00	Africa RISING Management, <i>Dr. Irmgard Hoeschle-Zeledon</i>
10.10	Babati District Council, District Executive Director, <i>Mr. Dominic Kweka</i>
<b>10.20</b>	<b>Official opening of the Babati District R4D Platform</b> Guest of Honour: Regional Commissioner, Manyara Region, <i>Mr. Eraston Mbwilo</i>
10.30 – 10.40	GROUP PHOTO
10.40 – 11.00	Voices of stakeholders: Four introductions
11.00 – 13.00	Stakeholder introductions ( <i>all stakeholders</i> )
13.00 – 14.30	Lunch
14.30 – 15.00	Babati District R4D Platform – Background ( <i>Per Hillbur</i> );  Powerpoint presentation available at <a href="http://africa-rising.wikispaces.com">http://africa-rising.wikispaces.com</a>
15.00 – 16.00	Scientists' presentations  Powerpoint presentation available at <a href="http://africa-rising.wikispaces.com">http://africa-rising.wikispaces.com</a>
16.00 – 16.30	Comments to presentations; discussion
16.30 – 17.00	Coffee, tea, refreshments
17.00 – 18.00	Group work 1: Trends and Challenges
18.00 – 18.30	Reporting from the groups; summing up of day 1
19.30 -	Dinner

**Friday, April 11**

8.30 – 9.30	Reporting from the groups; summing up of day 1, cont.
9.30 - 10.15	Plenary discussion on challenges
10.15 – 10.45	Tea
10.45 – 11.00	Sharing experiences: platforms in Africa RISING West Africa ( <i>Dr. Asamoah Larbi</i> )
11.00 – 12.00	Group work 2: The way forward
12.00 – 13.00	Reporting from groups; discussion on activities/management
13.00 – 14.00	The future of the platform. Ownership of process.
14.00 -	Lunch; departure
(15.00 – 17.00	Platform management committee meeting)

## Annex 2: Results from group task: Trends and Challenges

Hali ya sasa na changamoto katika maendeleo ya kilimo Babati

### Trends and challenges in agricultural development in Babati

TARANGIRE .GROUP: S. Lyimo, F. Ngulu, N. Ndili, C. Shayo, I. Shavini, J. Kihara, H. Lugendo, W. Baynit, J. Kyekaka

Changamoto:

1. Babati kuna uzalishaji mkubwa sana wa mahindi na hata National Food Reserve Agents huwa wanashindwa kumaliza lakini utakuta kwamba wananchi wanakuwa na upungufu wa chakula, kwa nini?
  - Manyara wanazalisha aina moja ya zao kwa chakula na kipato (cash + food) kwa hiyo ada, ujenzi, matibabu na kadhalika lazima vitoke kwenye kuuza mahindi.
  - Hakuna soko zuri la mazao mengine kama mtama hivyo mahindi yanabakia kuwa na soko.
  - Wakulima wanashauriwa kuchanganya kilimo (diversification) ili kutumia vizuri mvua za vuli na masika. Yaani kilimo mara mbili kwa msimu.
2. Babati kuna uhaba na ubora wa malisho ya mifugo
3. Manyara eneo kubwa la wafugaji limezungukua na hifadhi ya taifa kwa hiyo kuna urahisi wa kutokea magonjwa ya mifugo yanayotokana na hifadhi
  - Hii imesababishwa na matumizi mabaya ya ardhi. R4D watoe ushauri livestock vs. farming
  - Hakuna sera nzuri ya kulinda wakulima na wafugaji katika matumizi ya ardhi
  - Wananchi hawajui kilimo cha malisho ya mifugo
  - Ongezeka la wanyama = uharibifu wa ardhi
4. Kuna mashamba darasa wengi sana lakini si wakulima wote wanapelekwa kujifunza. Wachache huwa wanajifunza. Kuwe na siku ya wakulima kila mwezi ili wajifunze.
5. Bashnet – Babati kuna ugonjwa wa kunyauka kwa majani ya viazi (Bacterial wilt)
  - IITA wameshachukua sampuli kujua sababu na baadaye kuona suluhu ni nini!
6. Wakulima waunganishwe na taasisi za kifedha ili kuwa na kilimo cha biashara (commercialization)
  - Wanashauriwa kuwa na Warehouse Receipt System (Ghalani)
  - Kufungua SACCOs
7. Sera ya soko la mazao haipo, kama ipo hasaidi mfano
  - Hakuna kuuza mazao nje ya nchi
  - Serikali haitoi fidia bei ziki poromoka
8. Ongezeka la thamani (value addition)
  - Watu/wakulima wajengewe uwezo ili mazao yaongezwe thamani kabla ya kuuzwa au kutumiwa
9. Upatikanaji na ardhi (access to land)
  - Ardhi Manyara ni hafifu ndiyo maana kuwa migogoro mingi
  - Mahali pa kuchunga na kulima hapatoshi lakini pia hapajatengwa vizuri.

LAKE GROUP: Zahoro Madongo, Alhaji Saidi, Ritha Dawite, Lucian Qamara, Dr H N Lyimo, Tomas Mbula, Judith Fulgence, Beanson Charles, Rashidi Mohamedi



Changamoto:

1. Ongezeko la watu:
  - Ardhi ni ileile – haitosherezi
  - Uharibifu wa mazingira
  - Chakula haitosherezi (food security)
2. Kilimo:
  - Upatikanaji wa pembejeo na vifaa
  - Gharama za kununua pembejeo na vifaa
  - Visumbufu vya mimea na mazao
  - Mbegu zisizokizi viwango
  - Bageti ndogo inayotengwa kuwasaidie wakulima na wafugaji
  - Miundombinu – ya hifadhi na usafirishaji
  - Soko la uhakika – hakuna
  - Mabadiliko ya tabia ya nchi
  - Mind set – kutokutaka kubadiliko kwa wakulima kwa haraka
  - Utayari wa vijana kuwa wakulima
3. Mifugo:
  - Maeneo ya malisho hayatoshi
  - Malisho duni
  - Magonjwa ya mifugo
  - Upatikanaji wa ngombe bora
  - Wizi wa mifugo
  - Miundombinu ya masoko
  - Utayari wa vijana kuwa mfugaji
  - Mila na desturi za ufugaji
  - Pembejeo/madawa zilizopitwa na muda/zisizo na ubora

Kundi namba "KIBOKO"

Washiriki: Eliminata Paskali, Judith Manzi, Anna Roman, Shabani Mruma, Mwajabu Sadiki, Leonard Marwa, Emmanuel Koyano, Issa A Zava

Changamoto:

1. Magonjwa
  - a. MLN, Mnyuko fusarium (Mbaazi)
  - b. Magonjwa ya mlipuko e g Rabies, Anthrax, Ndorobo
2. Soko/ukosekanaji wa soko la uhakika
  - a. Uzalishaji mkubwa hasa kipindi cha mavuno/masika ila gharama za kuuza mazao zinakuwa chini e g maziwa
  - b. Kuzuiwa kuuza bidhaa/mazao nje ya nchi
  - c. Wakulima hawana elimu ya mnyororo wa thamani wa mazao yao kama mahindi
3. Miundombinu mibovu
  - a. Mababarara yasiyopitika vizuri kwa magari yanayochukua mazao
  - b. Madalali (middlemen) wanatoa bei ndogo

4. Chonjo
  - a. Kutokuwa na dawa/chanjo ya kuaminika (kuku etc)
  - b. Kutokuwa na vifaa vizuri vya kuhifadha chanjo
5. Ongezeka la watu
6. Uharibifu wa mazingira
  - a. Idadi kubwa ya watu na mifugo
  - b. Matumizi mabaya ya ardhi
  - c. Idadi kubwa ya mifugo kuliko uwezo wa ardhi
  - d. Kuvamiwa kwa nyanda za malisho

#### JINSI GANI JUKWAA LINAWEZA KUSAIDIA:

1. Kuwakutanisha wakulima na watunga sera kufunga sera na sheria za mazingira endelevu
2. Kuhamasisha/ kutoa elimu ya uzazi wa mpango
3. Kutafuta masoko / kuwezesha upatikanaji wa masoko
4. Kuwezesha wakulima kuwa na uwezo wa kuongeza thamani ya mazao

#### Kundi MT HANANG

Washiriki: Bernard Sambali, Patric Kisamo, Daniel Manyangu, Aloyce Kasindei, Jackson Mbwambo, Pascal Martin, Daniel Domu, Andrea Mayi, Christopher Lyamuya

#### Changamoto:

1. Pembejeo zinachelewa kufika eneo husika kwa wakati
2. Hali ya hewa – mvua zinanyesha chache na zisizo na mtawanyiko mzuri
3. Utunzaji mbaya wa kumbukumbu
4. Wakulima kudai posho wakati wa kuandaa mashamba yao ya majaribia
5. Eneo la malisho ni dogo kulingana na Idadi ya mifugo
6. Uwepo wa uwingi wa visumbufu vya mimea (wadudu na magonjwa)
7. Wakulima kuacha mradi baada ya utafiti kumalizika
8. Ukosefu wa masoko ya uhakika kwa mazao ya kilimo na mifugo
9. Ukosefu wa baadhi ya vitendea kazi muhimu kwa wataalam wa ugani vijijini
10. Wakulima wengi kutofuata kanuni bora za kilimo na mifugo wanazapewa na wataalam
11. Wakulima wengi kutopenda kutumia mbolea za viwandani kwa kwani kwamba zinaharibu udongo

#### Ufumbuzi:

1. Wanaosambaza pembejeo wazipeleke mapema na elimu itolewa mapema
2. Kutolewe elimu ya kilimo hifadhi
  - Kupanda kwa wakati
  - Kufanyike uvunaji wa maji ya mvua
3. Elimu ya utunzaji wa kumbukumbu itolewe
4. Uwazi uwepo kabla ya zoezi kuanza kwa wakulima husika na pia afisa ugani awe makini kuchagua wa kulima

5. Watu wafuge mifugo kutokana na wa ukubwa wa eneo na malisho yaliyopo – elimu ya usindikaji vyakula kwa asili ya baadaye
6. Kufuata kanuni bora za kilimo – matumizi sahihi ya viuatilifu
7. Elimu itolewe ya uendelezaji shughuli baada ya utafiti
8. Wafugaji na wakulima watafutiwe/waunganishwe na masoko wa uhakika
9. Uwezeshwaji upatikanaji wa vitendea kazi
10. Kuwa na ziara za mafunzo za ndani na nje/ kubadilishana uzoefu
11. Majaribio ya mbolea yaendeleo kufanyika na kuwa na siku za wakulima kuonyesha matokeo ya mavuno

#### SHOKA group

##### Changamoto zilizopo

1. Upatikanaji wa pembejeo bora za kilimo hasa mbegu bora za mazao ya chakula ni tatizo
2. Wakulima na wafugaji bado hawana elimu bora ya kuzalisha mazao ya kilimo kibiashara, wanazalizo kwa mazoea tu yasiyo na tija
3. Gharama kubwa za pembejeo zipo juu, hali inayosababisha wakulima wasimudu kununua pembejeo bora
4. Mabadiliko ya hali ya hewa (tabia nchi) yamesababisha kutokuwepo na maji mengi ya umwagiliaji haki inayofanya wakulima kutegemea kilimo cha mvua za msimu tu
5. Elimu duni juu ya utambuzi wa magonjwa na wadudu wanaoshambulia mazao, pia elimu duni juu ya matumizi sahihi ya viuatilifu na muda gani wa matumizi. Na hili nitatizo pia kwa maafisa ugani wengi.
6. Kukosekana kwa majosho yake
7. kutokutambua "mbari" au ukoo husika wa mifugo yao
8. kutokwepo kwa mbegu bora za malisho kulingana na mabadiliko ya hali ya hewa
9. Upotevu wa mazao mengi nyakati za mavuno
10. Kutokwepo na ufahamu wa kutosha juu ya kuhifadhi samadi kwa matumizi ya shambani, baadae

##### HALI YA SASA

1. Taasisi za utafiti wa mbegu ziandae mpango thabiti wa ukaguu wa mara kwa mara ili kudhibiti ubora wa mbegu (pembejeo)
2. Elimu zaidi itolewe kwa vitendo kwa wakulima juu ya kilimo bora chenye tija, kwa kushirikisha wadau wote
3. Wakulima wajiunge katika vikundi ili waweze kukopeshwa fedha na taasisi za fedha lengo wamudu kupata pembejeo bora kwa wakati
4. Wakulima waelimishwe juu ya kilimo hifadhi na utumiaji wa mbegu bora za muda mfupi
5. Elimu ya viuatilifu itiliwe mkazo kwa kuwashiriusha wadau wahusika (mfano: TPRI na wasambaji wa viuatilifu)
6. Ibuniwe mipango ya ujenzi wa majosho ya mifugo

Ahsante, imeratibiwa na katibu wa kikundi Chonya Wema

Shoka group: Inviolante Dominick, Kheri Kitenge, Gilbert Mbesere, Tumaini Elibariki, Mary Siay, Chonya Wema, Paulina Dawite, Simon G Laway, Dr. Mary Mashingo

#### Kikundi “ENGLISH”

Dr Irmgard Hoeschle-Zeledon, Dr. Asamoah Larbi, Dr Ivan Rwomushana, Dr Julius Bwire, Dr Libère Nkurunziza

A: Hali ya sasa na changamoto Babati:

1. Hali ya sasa: Ongezeko la watu na mifugo
  - Changamoto: hakuna ardhi ya kutosha, malisho, uharibifu wa mazingira, upatikanaji wa malisho kwa wakati na siyo bora, nyumba zasizo bora wa mifugo
2. Hali ya sasa: Ongezeko la bidhaa/mazao (Mfano: mahindi, mayai)
  - Changamoto: Ukosefu wa taarifa za masoko
3. Hali ya sasa: Magonjwa mapya na wadudu kwa mazao na mifugo + sumkuvu kuongezeka katika nyororo wa thamani
  - Changamoto: inachukua muda mrefu kupata ufumbuzi; (sumkuvu): kwenye malisho na ubora wa maziwa yanahadhirika kwa mifugo na binadamu
4. Hali ya sasa: Wakulima wanatambua umuhimu wa pembejeo (mbolea, mbegu bora, etc)
  - Changamoto: Soko la pamoja; nafasi ya Jukwaa kutambua mahitaji ya pembejeo.
5. Hali ya sasa: Uwelewa wa kuhisisha kilimo cha mbogamboga katika shughuli za kilimo (kuongeza lishe na kipato)
  - Changamoto: ukosefu wa maji ya umwagiliaji kipindi cha kiangazi

B: Kilimo endelevu kinahitajika?

NDIYO! Tunaona nivyema kuongeza uzalishaji pamoja na matumizi sahihi ya rasilimaji uendelevu wa mfumo wa uzalishaji.

C: Wajibu wa Jukwaa katika kutekeleza

- Ni sehemu ya kujifunza na kupata mabadiliko
- Kubadilishana uzoefu ambao utatusaidia kubaini matatizo yanayo itokeza
- Kuwaunganisha wadau pamoja na kujenga uimara wa taasisi
- Jukwaa litasaidie kuweka vipao mbele vya matatizo katika wilaya

TARANGIRE GROUP: S. Lyimo, F. Ngulu, N. Ndili, C. Shayo, I. Shavini, J. Kihara, H. Lugendo, W. Baynit, J. Kyekaka

#### Challenges:

1. Babati has a very high production of maize, but the NFRA cannot manage to buy all of the harvest available for sale. Meanwhile, the farmers suffer from shortage of food, why?
  - Manyara produce mainly one kind of food crop, namely maize, and therefore money for school fees, construction, health care, etc., depend on incomes from selling maize.
  - There is no proper market for other cereal crops than maize, like e g sorghum. That is why maize remains at the market.
  - Farmers should be involved in diversification of farming, in order to make the most of the long rains. There is an opportunity to take two crops per year in this area.
2. There is not enough feed for livestock in Babati, and the quality is generally low.
3. A large part of Manyara is surrounded by national parks, and therefore there is a great risk for the livestock populations to be attacked by different diseases from wildlife.
  - This is the result of improper land use. The R4D platform should advise for proper practices of farming and livestock keeping
  - There is no good policy that supports farmers and livestock keepers on land use issues.
  - The farmers do not have enough knowledge in pasture management.
  - Increase of the livestock population = land degradation
4. There are a lot of demo plots, but the farmers do not go there to learn. Only a few of them go there to learn. There should be at least one field day per month.
5. There is a new disease (bacterial wilt) on potatoes in Bashnet area.
  - IITA has already taken samples to analyze in order to look for solutions to this problem.
6. The farmers should be linked to the financial institutions to stimulate farming as a business (commercialization)
  - There should be an emphasis on the Warehouse Receipt System
  - To open SACCO groups
7. There is no market policy for crops, and if present, it does not support farmers
  - You cannot export crops outside the country
  - The government does not provide crop insurance when the price is low
8. Value addition
  - The people/farmers should be trained in adding value to the crops before selling, e g through processing
9. Access to land
  - There is not enough land in Manyara, which leads to many conflicts
  - The area for grazing and crop production is not enough because of improper land use

LAKE GROUP: Zahoro Madongo, Alhaji Saidi, Ritha Dawite, Lucian Qamara, Dr H N Lyimo, Tomas Mbula, Judith Fulgence, Beanson Charles, Rashidi Mohamedi

#### Challenges:

1. Population increase:
  - Land area is the same – it is not enough
  - Environmental destruction
  - Food security is threatened

2. Agriculture.

- There is a lack of equipment and inputs
- The price for inputs and equipment is high
- Plants and crops are infested by insect pests
- The quality of available seeds is not proper
- The budget to support farmers and livestock keepers is too low
- Poor infrastructure for transport of crops
- There is no proper market
- Climate change
- There is a need for immediate change in mind set of farmers
- The youth should be engaged to become farmers

3. Livestock:

- The grazing areas are not enough
- The quality of pasture is poor
- Livestock diseases
- Lack of improved breed of cattle
- Theft of livestock
- Infrastructure and markets
- The youth should be engaged to learn livestock keeping
- Cultural practices of livestock keeping
- Inputs/agrochemicals available may already have expired or are of poor quality

Group "KIBOKO"

Members: Eliminata Paskali, Judith Manzi, Anna Roman, Shabani Mruma, Mwajabu Sadiki, Leonard Marwa, Emmanuel Koyano, Issa A Zava

Challenges:

1. Diseases

- a. MLN, Fusarium wilt (pigeon peas)

Endemic diseases: Rabies, anthrax, East Coast Fever

2. Market/ lack of proper market

- a. When large amounts of products are available in the harvest season, the prices are low, for crops as well as for milk.
- b. There are restrictions to export of commodities/crops
- c. Farmers lack knowledge about value addition in their crops such as maize

3. Poor infrastructure

- a. The roads are not in a good condition for lorries transporting crops
- b. Middlemen who provide low costs in products

4. Vaccination

- a. Lack of proper drugs/vaccine (e.g. for poultry)
- b. Lack of proper handling/storage of vaccine

5. Population increase

6. Environmental degradation

- a. Large populations of people and livestock

- b. Improper land use practices
- c. Livestock numbers exceed the carrying capacity
- d. Farm encroachment into grazing lands

How can the R4D platform assist?

- 1. To link farmers and policy-makers to come up with sustainable environmental policies
- 2. To create awareness/ learn about family planning
- 3. To identify markets and to learn to access markets
- 4. To train farmers in value addition of crops

Group Mount Hanang

Members: Bernard Sambali, Patric Kisamo, Daniel Manyangu, Aloyce Kasindei, Jackson Mbwambo, Pascal Martin, Daniel Domu, Andrea Mayi, Christopher Lyamuya

Challenges:

- 1. Farm inputs are sometimes delayed to reach the farm.
- 2. Weather conditions – unreliable rainfall in terms of amount and distribution
- 3. Poor record keeping
- 4. The farmers demand money for land preparation of demo plots for research
- 5. The grazing lands are small compared to the livestock population
- 6. There is a lot of insect infestations on plants (pests and diseases)
- 7. The farmers leave the project after its completion
- 8. There is no proper market for crop and livestock products
- 9. There is a lack of important equipment for the village extension agents
- 10. Many farmers look for good agronomic and livestock keeping practices from experts.
- 11. Many farmers do not want to use industrial fertilizer because of destruction of the soil.

Solutions:

- 1. The input suppliers should deliver on time and provide knowledge of its uses
- 2. Training on conservation agriculture
  - Time of planting
  - Rainwater harvesting
- 3. Training in record keeping
- 4. Transparency of planning of research activities before start, particularly in selection of farmers by extension agents
- 5. The livestock keepers should adapt the number of livestock to the area available – and to learn about processing of traditional foods for the future
- 6. To look for good agricultural practices – and proper use of insecticides
- 7. Training/preparation for involvement in research activities
- 8. Farmers and livestock keepers should be linked to proper markets
- 9. Access to and knowledge about farm equipment
- 10. Field days within and outside the village for knowledge sharing

11. Trials for use of industrial fertilizer and farmer field days should be continued to be conducted so that farmers can see the yield results.

#### SHOKA group

Shoka group: Inviolante Dominick, Kheri Kitenge, Gilbert Mbesere, Tumaini Elibariki, Mary Siay, Chonya Wema, Paulina Dawite, Simon G Laway, Dr. Mary Mashingo

#### Challenges faced:

1. The lack of agricultural inputs like improved seeds for food crops is a problem
2. Farmers and livestock keepers have not yet got good training in farming as a business, so they still mainly produce for home consumption.
3. High prices in farm inputs prevent farmers from buying these inputs.
4. Changes in weather conditions (climate change) prevent farmers from practicing irrigation, so they need to rely on rainfed farming only.
5. Lack of knowledge of identifying pests and diseases that attack crops, also a lack of knowledge of proper use of insecticides and time of application. This is also a problem for extension agents.
6. Lack of cattle dips
7. There is a lack of record keeping in cattle breeding
8. There is a lack of seeds for pasture grasses for different weather conditions
9. Crop losses are considerable during harvest
10. There is a need for widespread knowledge about handling and use of farmyard manure in the fields, for future needs.

#### TRENDS

1. Research institutions should be involved to check regularly the seeds introduced in order to ensure the quality.
2. Farmers should be provided with practical training in farming-as-a-business, involving all stakeholders.
3. Farmers should organize in groups to connect to financial institutions in order to get loans easier and to get inputs on time.
4. Farmers should be aware of conservation agriculture in order to use short-term varieties
5. Knowledge of insecticides should be emphasized in collaboration with different stakeholders (e.g. TPRI and agro-dealers)
6. Involvement of selected stakeholders for construction of cattle dips

“ENGLISH” Group: Dr Irmgard Hoeschle-Zeledon, Dr. Asamoah Larbi, Dr Ivan Rwomushana, Dr Julius Bwire, DR Libère Nkurunziza



A: Current trends and challenges from Babati:

1. Trend: Increase of human and livestock populations
  - Challenge: low land availability, feed availability, land degradation, seasonality of feed availability and quality, poor housing for livestock
2. Trend: Increased production of some commodities (e.g. maize, eggs)
  - Challenge: lack of market information
3. Trend: new diseases and pests for crops and livestock + mycotoxins increase in the value chain
  - Challenge: It takes time to find solutions; (mycotoxins): feeds and milk quality are affected, thus livestock and human beings
4. Trend: Farmers are recognizing the importance of inputs (fertilizers, new varieties, etc)
  - Challenge: requires an organized market; Opportunity for the platform to improve the demand-supply of inputs
5. Trend: there is an awareness to integrate vegetables in the farming systems (improved diets and incomes)
  - Challenge: the lack of water for irrigation during off-season needs to be addressed

B: Is sustainable intensification needed?

YES! We see a need of increasing productivity but also a proper management of natural resources to make a lasting production system.

C: The role that the platform can play

- It is a place for learning and triggers changes
- Knowledge sharing that can help with guidelines on how to go about arising problems
- Put together actors strengthen the institutions
- The platform helps prioritize local challenges at the district level

## **Annex 3: Results from group task: Activities and Responsibilities of the future platform**

## **Shughuli za kufanywa na Jukwaa la Utafiti na Maendeleo Wilaya ya Babati**

- Individual suggestions from platform members April 11, 2014

Task: Suggest three activities or responsibilities (majukumo) for the JUMBA (for Swahili, see below)

Activities which are needed:

1. Improved maize seeds
2. Another type of industrial fertilizer
3. We need improved breed of dairy cow

To improve agriculture:

1. Extension agents
2. To improve life
3. To learn to use ox-plough

Knowledge to be provided to farmers:

1. To learn about livestock diseases
2. To learn about problems in plants
3. To learn about improved seeds
4. To learn about dairy cows

Activities to be carried out by the platform:

1. To train the farmers on better use of agricultural inputs so that they can increase their income
2. Capacity building: (i) extension agents should be supported so that they easily can reach the farmers; (ii) farmers should be trained on better use of agricultural inputs
3. Livestock keepers should be trained in how to keep and harvest their livestock

1. Diseases
2. Destruction
3. Inputs

Activities which should be carried out by the platform

1. To help the farmers to be engaged in farming as a business – instead of subsistence farming – they should cultivate a portion of land that they can manage to increase their yield

2. To link the farmers/livestock keepers to the market and to provide training on value addition of their products so that they can increase their income
3. Training in land use planning in order to improve life e.g agriculture, livestock keeping and fisheries

1. Improved local breed of livestock (artificial insemination) to reduce the number of livestock according to the carrying capacity of pasture lands
2. Extension agents In agriculture and livestock should be trained and provided with tools so that the project should be sustainable
3. The seeds of different crops and industrial fertilizer should be made available and the price should be affordable to the farmers

#### Activities:

1. Monitoring of the price at the market
2. Inputs should be available to the farmers all of the time
3. Demo plots on farmers' land

#### Three activities that the platform should carry out:

1. The platform should link extension agents from different areas and be provided with capacity building and knowledge sharing within agriculture and livestock keeping
2. The platform should provide farmers with market linkages
3. The platform should be engaged in research activities so that results of the research show impact

#### Three things that the platform should be implementing:

1. To identify the problems of the livestock – the solution is that local breeds should be improved through the use of artificial insemination
2. Capacity building of extension agents and livestock keepers on (i) to identify diseases of crops and livestock, (ii) knowledge of good practices in agriculture and its advantages, (iii) the advantage of using improved seeds and industrial fertilizer
3. Training in how to sell livestock and to engage them in proper markets

#### Three activities that the platform should carry out:

1. Knowledge about pest control management (insect pests and diseases) in crops and plants
2. To identify proper markets for farmers' crops
3. To improve working conditions for village extension workers

#### Sustainable activities:

1. Good agricultural practices
2. Good livestock keeping

3. Train farmers in farming as a business

- 1. Farmers should be provided with seminars on different topics
  2. Farmers should be stimulated to visit each other for knowledge sharing
  3. The experts and farmers should help each other to build knowledge

Activities:

1. The market price of the products should be known by the farmer
2. Land use planning among farmers and livestock keepers
3. Destruction of plants

Responsibilities:

1. Diseases
2. Infrastructure
3. Returns

1. Capacity building of farmers and livestock keepers
2. Diseases
3. Marketing

1. Accessibility of inputs for agriculture and livestock
2. To create awareness among youth and stimulate them to engage in agriculture and livestock sector
3. Proper land use planning

Three activities:

1. Environmental conservation
2. To increase crop productivity
3. To engage farmers in research activities about new technologies

1. Diseases
2. Capacity building
3. Marketing

Three activities:

1. Productivity enhancement in agriculture and livestock keeping
2. Capacity building and training in agriculture and livestock keeping
3. To stimulate a sustainable market and value addition of crop and livestock commodities (organized markets)

Three activities:

1. Capacity building of farmers, livestock keepers and extension agents
2. To diagnose/prevent insect pest infestation as well diseases on crops and livestock
3. To increase productivity of different crops and livestock by proper land use

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Three activities to be carried out by the platform:

1. To stimulate productivity in livestock by improved practices
2. Disease control in animals (livestock) i.e vaccination and disease control such as dipping practices
3. Land use plan: to plan for areas for cropping and livestock keeping, respectively, and make sure that by-laws work

•

Activities to be implemented by the platform:

1. Capacity building of farmers and livestock keepers
2. To strengthen market system of crops, agriculture and livestock
3. To emphasize the role of proper land use planning (to emphasize the policies)

Activities:

1. Productivity: activities could be initiated as commodity value chain improvement: production, processing, marketing
2. Land use: activities follow laws and regulations: village land use planning; joint village land use planning for resource use conflict reduction

Activities to be carried out by JUMBA:

1. Capacity building to farmers about different innovations: training of trainers; to organize farmers in different groups; participatory methodology
2. Production, processing and marketing
3. Networking

1. Range and pasture land development
2. Livestock disease control
3. Livestock productivity enhancement

1. Capacity building
2. Link farmers with inputs and outputs markets
3. Technology testing and verification & upscaling

1. Capacity building
2. Productivity
3. Pests and diseases

Activities to be implemented by a platform:

1. Capacity building
  2. Pests/diseases
  3. Market linking
- 
1. Productivity
  2. Pests and diseases
  3. Market

3 activities to be done by the platform:

1. Capacity building (knowledge)
2. Pest and disease control
3. Markets

3 main activities:

1. Capacity building on postharvest handling practices/technologies
2. Awareness creation on importance of nutrition and proper feeding for the household members
3. Strategies regarding facilitation of adoption of research innovating technologies to farmers (research-extension strengthening)

#### Shughuli zinazohitajika

1. Mbegu bora za mahindi
2. Nyingine mbolea tunalitaka
3. Tunahitaji mbegu kisasa ngombe bora

#### Kuboresha kilimo:

1. Maafisa ugani
2. Kuboresha maisha
3. Ikatumia jembe la ngombe

#### Elimu itolewa kwa wakulima kuhusu:

1. Kujua magonjwa ya mifugo
2. Kujua matatizo ya mimea
3. Kujua mbegu bora
4. Kujua ngombe wanaotoa maziwa

#### Shughuli za kufanywa na Jukwaa:

1. Kuwaelimisha wakulima (walengwa) namna bora ya kulima na kutumia pembejeo bora za kilimo ili kuinua kipato cha mkulima
2. Uwezeeshaji (i) maafisa ugani wawezeshwe ili kuwafikia wakulima kwa urahisi; (ii) wakulima pia wawezeshwe ili namna bora ya kutumia pembejeo
3. Wafugaji waelimishwe namna ya kupunguza mifugo na kufuga kwa tija

1. Magonjwa
2. Uharibifu
3. Pembejeo

#### Shughuli zinazopaswa kufanyika Jukwaa:

1. Kuwasaidia wakulima kuingia katika kilimo cha biashara – badala ya kilimo cha kujikimu, walime maeneo waliyo wa uwezo nayo kwa mavuno makubwa
2. Kuunganisha wa kulima/wafugaji kuwa na kilimo ambacho kina angalia soko na pia kupata elimu ya kusindika mazao yao ili kuongeza ubora
3. Elimu ya kuwa na matumizi sahihi ya ardhi ili kuboresha maisha yao mfano; kilimo, mifugo, uvuvi

1. Kuboresha mifugo ya asili (uhamilishaji) ili kuwa na mifugo michache kuendana na eneo la malisho
2. Maafisa kilimo/mifugo wajengewe uwezo na zana za kazi ili mradi uwe endelevu
3. Mbegu za mazao mbalimbali ziwe za uhakikana bei ya mbegu na mbolea ziwe na nafuu kwa mkulima wa chini

#### Shughuli:

1. Usimamizi wa bei kwenye masoko
2. Pembejeo ziwafikie wakulima kwa wakati
3. Demo plot kwa wakulima

Shughuli tatu ambazo jukwaa hili litatakiwa kuzifanya:

1. Liunganishe maafisi ugani wa maeneo mbalimbali na kuwajengea uwezo wa kubadilishana uzoefu na wataalamu wa kilimo na mifugo
2. Liwanganishe wakulima wa masoko ya uhakika
3. Lijikite zaidi katika kutafuta watafiti na kuutumia utafiti huo uweze kuleta tija

Mambo matatu jukwaa kutekeleza:

1. Kutatua matatizo ya wafugaji – ikiwepo kuboresha ngombe wa asili kwa kutumia njia bora za kisasa AI
2. Kuwajengea uwezo wataalamu na wafugaji kuhusu: (i) magonjwa ya mifugo na kilimo; (ii) elimu ya kilimo bora na faida zake; (iii) kuchanganua faida za kutumia mbolea za kisasa na mbegu za kisasa
3. Kutoa elimu ya kuvuni mifugo yao ni kuwapatia masoko ya uwakika

Shughuli (3) ambazo Jukwaa linatakiwa kuzifanya:

1. Udhhibiti wa visumbufu (wadudu & magonjwa) katika mimea na mazao
2. Kutafuta masoko ya uhakika ya mazao ya wakulima
3. Kuboresha huduma za ugani vijijini

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Shughuli endelevu:

1. Ukulima bora
2. Ufugaji bora
3. Kumwendeleza mkulima katika shughuli za biashara

1. Wakulima wapewe semina mbalimbali
2. Wakulima wa tembeleana kupeana uzoefu
3. Wataalamu washirikianana wakulima ili wakulima wapate elimu ya kutosha

Shughuli:

1. Bei inayoeleweka kwa wakulima
2. Kuhifadhi ardhi kwa wakulima na wafugaji
3. Maradhi ya mimea

Majukumo

1. Magonjwa
2. Miundombinu
3. Upokeaji

1. Kuwajengea uwezo wakulima/wafugaji
2. Magonjwa
3. Masoko

1. Mpatikanaji wa pembejeo za kilimo na mifugo



2. Kuhamasisha na kutoa mafunzo kwa vijana kukubali kilimo/ufugaji
3. Mipango bora ya matumizi ya ardhi

Shughuli tatu:

1. Uhifadhi wa mazingira
2. Kuongeza uzalishaji wa mazao
3. Ushirikishwaji wa wakulima katika shughuli za utafiti na teknolojia mbalimbali

1. Magonjwa
2. Uwezo
3. Masoko

Shughuli 3:

1. Kuongeza uzalishaji wa mazao na mifugo (productivity enhancement)
2. Kuwajengea uwezo wakulima na wafugaji (capacity building – training)
3. Kuwa na masoko endelevu na kuongeza thamani ya mazao ya kilimo na mifugo (organized markets)

Shughuli 3:

1. Kujenga uwezo kwa wakulima/wafugaji wa extension agent
2. Utambuzi uzuiaji wa magonjwa na wadudu kwa mimea na mifugo
3. Kuongeza uzalishaji wa mazao mbalimbali (land use) ya kilimo/mifugo

Shughuli 3 ambazo jukwaa linatakiwa kuzitengeneza:

1. Productivity: uzalishaji wa mifugo yenye tija
2. Disease control in animals (livestock) i.e vaccination and disease control such as dipping practices
3. Land use plan: kutenga maeneo ya kilimo na maeneo ya mifugo na kuhakikisha sheria zinafanya kazi

Shughuli za kutekelezwa na Jukwaa:

1. Kujenga uwezo kwa wakulima/wafugaji – capacity building
2. Kuimarisha mfumo wa masoko ya mazao ya kilimo na mifugo
3. Kusimamia matumizi bora ya ardhi (kusimamia sera)

Shughuli

1. Uzalishaji wa mazao:
  - a. Kuongeza thamani kwa njia ya:
    - i. Usindikaji na masoko na uzalishaji
2. Matumizi bora ya ardhi: Shughuli ya kufanya
  - Vijiji kuwa na mpango wa matumizi ardhi
  - Vijiji kuungana na kuwa na mpango wa matumizi bora wa ardhi kwa ajiji ya matumizi mazuri na kupunguza migogoro

Shughuli ambazo JUMBA yapaswa kutekeleza:

1. Kuwajengea wakulima uwezo kuhusu teknolojia mbalimbali:

- Mafunzo kwa wakulima viongozi
- Kuwaweka wakulima katika vikundi mbalimbali
- Kuwafundisha mbinu shirikishi

2. Uzalishaji, Usindikaji na masoko

3. Mawasiliano

1. Yanda za malisho ziboreshwe
2. Kuzuia magonjwa ya mifugo
3. Kuongeza uzalishaji wa mifugo

1. Kujengea uwezo
2. Kuwa unganisha wakulima na masoko ya ndani na nje
3. Kutambua teknolojia na kuzifanya kazi na kuzitawanya

1. Kujengea uwezo
2. Kuongeza uzalishaji
3. Kutambua magonjwa na wadudu

Shughuli zitakazotekelezwa na Jukwaa:

1. Kujengea uwezo
2. Kutambua magonjwa na wadudu
3. Kuwa unganisha na masoko

1. Kuongeza uzalishaji

2. Kutambua magonjwa na wadudu
3. Masoko

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Shughuli tatu zitakazotekelezwa na Jukwaa:

1. Kujengea uwezo
2. Kutambua magonjwa na wadudu
3. Masoko

Shughuli tatu kuu:

1. Kujengea uwezo katika uhifadhi wa mazao kwa kutumia teknolojia mbalimbali
2. Kuhamasisha umuhimu wa lishe bora katika kaya.
3. Kuwa na mikakati yakupokea teknolojia za utafiti na kuzifanyia kazi

#### Annex 4: Participant's list

	Participant/Name	Organization
1	Guest of Honour: Mr. Eraston Mbwilo	Regional Commissioner, Manyara Region
2	Ms. Rita Dawite	Long village
3	Mr. Luciano Qamara	Long village
4	Mr. Alfred Guando	Sabilo village
5	Ms. Eliminata Petro	Sabilo village
6	Mr. Andrea Mayi	Seloto village
7	Mr. Daniel Domu	Seloto village
8	Mr. Saimon Laway	Hallu village, Galappo SACCO
9	Ms. Paulina Dawite	Hallu village
10	Mr. Benson Charles	Matufa village, Mshikamano SACCO
11	Ms. Wajabu Sadiki	Matufa village
12	Mr. Tomas Mbula	Shaurimoyo village
13	Mr. Rashid Mohamed	Shaurimoyo village
14	Mr. Zahoro Madongo	BDC, MAFC, Long village
15	Mr. Bernard Sambali	BDC, MLFD, Long village
16	Mr. Christofer Lamuya	BDC, MLFD, Sabilo village
17	Mr. Johnson Mbwambo	BDC, MAFC, Seloto village
18	Mr. Patrick Kisamo	BDC, MLFD, Seloto village
19	Ms. Judith Manzi	BDC, MAFC, Hallu village
20	Ms. Anna Roman	BDC, MAFC, Matufa village
21	Mr. John Kalungo	BDC, MAFC, Shaurimoyo village
22	Mr. Pascal Martin	BDC, MAFC, Sabilo village

23	Mr. Gilbert Mbesere	BDC, MLFD, Babati
24	Ms. Jetrida Kyekaka	DAICO, MAFC, BDC, Babati
25	Mr. Hassan Lugendo	DLFO, MLFD, BDC, Babati
26	Mr. Danny Manyangu	MVIWATA Manyara
27	Mr. Aloyce Kasindei	TOBRA Dairy Goats Association
28	Mr. Chonya Wema	SATEC, SubaAgro
29	Ms. Judith Fulgence	Minjingu Mines
30	Mr. Shaban Mruma	PANNAR, Arusha
31	Mr. Stephen Lyimo	Selian ARI, Arusha
32	Mr. Kheri Kitenge	Selian ARI, Arusha
33	Dr. Maria Mashingo	Director, TALIRI, West Kilimanjaro
34	Dr. Julius Mbwire	Director, TALIRI, Tanga
35	Representative	FarmAfrica, Babati
36	Representative	FIDE, Babati
37	Mr. N. Ndili	Tuboreshe/Technoserve, Babati
38	Representative	Tuboreshe Chakula, Dar es Salaam
39	Dr. Bright Macdonald Jumbo	CIMMYT, Nairobi
40	Dr. Irmgard Hoeschle-Zeledon	IITA, Ibadan, Nigeria
41	Prof. Mateete Bekunda	IITA, Arusha
42	Mr. Isaac	CIAT, Kenya
43	Dr. Job Kihara	CIAT, Kenya
44	Mr. Emmanuel Koyano	IITA, Dar es Salaam
45	Dr. Victor Afari-Sefa	AVRDC, Arusha
46	Ms. Inviolante Dominick	AVRDC, Arusha

47	Mr. Leonard Marwa	TALIRI, West Kilimanjaro
48	Dr. Per Hillbur (Facilitator)	Malmö University, Sweden
49	Mr. Festo Ngulu	IITA, Arusha
50	Dr. Asamoah Larbi	IITA, Accra, Ghana
51	Ms. Catherine Njuguna	IITA, Dar es Salaam
52	Mr. Edgar Lyakurwa (Facilitator)	BDC, MAFC, Babati
53	Dr. Libére Nkurunziza	SLU, Sweden
54	Dr. Ivan Rwomushana	ASARECA
55	Dr. Victor Manyong	IITA, Dar es Salaam
56	Dr. Ainsley Charles	IFPRI, Arusha
57	Ms. Coletta Shayo	Regional Agricultural Adviser, Manyara Region
58	Representative	Regional Livestock Advisor, Manyara Region
59	Dr. Hurbert N. Lyimo	MLFD, Dar es Salaam
60	Ms. Irene Mwasaga	IITA, Arusha